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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,461

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EXAMINER

WANG, KENT F

ART UNIT

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2622

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/808,461	Applicant(s) ISHIYAMA ET AL.	
	Examiner KENT WANG	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/15/2008 has been entered.

Response to Amendment

2. The amendments, filed on 09/15/2008, have been entered and made of record. Claims 1 and 3-27 are pending.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 3-27 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1, 3, 9, 13, and 17-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumakura (US 4,622,682) in view of Tamura (US 6,771,896).

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Regarding claim 1, Kumakura discloses a print system (a facsimile communication system) having a transmitter and a receiver, said system comprising:

- first communication means (high speed modems 13, 23, Fig 1) for conducting high-speed radio data-communication between said printer controlling device (a transmitter 1, Fig 1) and said printer (a receiver 2, Fig 1), the predetermined data segment (image data) being transferred from said printer controlling device (1) to said printer (2) by using said first communication means (13 and 23) (2:35-47); and
- second communication means (low speed modem 12, 22, Fig 1) for conducting low-speed radio data-communication between said printer controlling device (a transmitter 1, Fig 1) and said printer (a receiver 2, Fig 1), the other data segment (various control signal) being transferred from said printer controlling device (1) to said printer (2) by using said second communication means (12 and 22) (2:35-47, Kumakura).

Kumakura does not disclose the printer performs a print job based on the predetermined data segment and the other data segment and the first communication means is automatically turned off when the data communication of the predetermined data segment is not conducted. However Tamura discloses a printer (a printer 223, Fig 3) performs a print job based on the predetermined data segment (order information wherein the prepared print information corresponds to digital image information, and this order information is stored in an empty area of image storage section 21) and the other data segment (print information which can be prepared by the user includes print designating information, print size information,

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information of the number of prints, and print finish information) (9:66-10:50, Tamura) and the first communication means is automatically turned off (the parent camera 120 turns off the power supply automatically which means disable the communication) when the data communication of the predetermined data segment is not conducted (when the state of communication between the parent camera 120 and the child camera 110 plus the printer 130 is worsened to be cut, which means the data communication is not conducted, Fig 12) (18:48-19:4, Tamura).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the printer as taught by Tamura into Kumakura's communication system, so as to enable the camera to turn off the power supply automatically, whereby consumption of batteries can be prevented in advance, therefore, it is possible to transmit photo accurately for the image information through stable communication (6:13-24 and 18:48-19:4, Tamura).

Regarding claim 3, the limitations of claim 1 are taught above, Kumakura does not disclose the predetermined data segment concerns image data and the other data segment concerns setting data for defining print conditions.

However, Tamura discloses the predetermined data segment concerns image data (order information wherein the prepared print information corresponds to digital image information) and the other data segment concerns setting data for defining print conditions (print information which can be prepared by the user includes print designating information, print size information, information of the number of prints, and print finish information) (9:66-10:50, Tamura).

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Regarding claim 9, this claim differs from claim 1 only in that the claim 1 is a “print system” claim whereas claim 9 is a “printer” claim. Tamura discloses a print system (print system with electric camera, Figs 2-4) having a printer (printer 223, Fig 3). Thus the claim 9 is analyzed and rejected as previously discussed with respect to claim 1 above.

Regarding claim 13, this claim differs from claim 1 only in that the claim 1 is a “print system” claim whereas claim 13 is a “printer controlling device” claim. Tamura discloses a print system (print system with electric camera, Figs 2-4) having a printer controlling device (liquid crystal screen 122 of a touch panel type, Fig 12). Thus the claim 13 is analyzed and rejected as previously discussed with respect to claim 1 above.

Regarding claim 17, Tamura discloses the first communication means is turned off such that no power is supplied to said first communication means (the parent camera 120 turns off the power supply automatically which means disable the communication) when the data communication of the predetermined data segment is not conducted (when the state of communication between the parent camera 120 and the child camera 110 plus the printer 130 is worsened to be cut which means the data communication is not conducted, Fig 12) (18:48-19:4, Tamura).

Regarding claims 18 and 19, these claims recite same limitations as claim 17. Thus they are analyzed and rejected as previously discussed with respect to claim 17 above.

Regarding claim 20, Kamakura discloses the first communication means and said second communication means are operable at frequencies less than 3 terahertz (the described response signals are signals in a frequency band, e.g., 330 Hz or 3,300 Hz) (3:49-55, Kamakura).

Regarding claims 21 and 22, these claims recite same limitations as claim 20. Thus they are analyzed and rejected as previously discussed with respect to claim 20 above.

Regarding claim 23, Tamura discloses the printer performs a print job based on the received image data (order information wherein the prepared print information corresponds to digital image information) and the received print-setting data (print information which can be prepared by the user includes print designating information, print size information, information of the number of prints, and print finish information) (9:66-10:50, Tamura).

Regarding claim 24, this claim recites same limitations as claim 23. Thus it is analyzed and rejected as previously discussed with respect to claim 23 above.

Regarding claim 25, Kamakura discloses the first communication means (high speed modems 13 and 23, Fig 1) and the second communication means (low speed modems 12 and 22, Fig 1) conduct the high-speed radio data-communication and the low-speed radio data-communication according to different communication standards, respectively (a cyclic redundancy checking (CRC) code are added to each of the block data thus formed and the block data added with additional information are supplied to the modem) (2:48-58, Kamakura).

Regarding claim 26, this claim recites same limitations as claim 23. Thus it is analyzed and rejected as previously discussed with respect to claim 23 above.

Regarding claim 27, Tamura discloses the first communication means is automatically turned off after said predetermined data segment is transferred from said printer controlling device to said printer (the parent camera 120 turns off the power supply automatically which means disable the communication), and said first communication means remains turned off

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while the other data segment is being transferred from said printer controlling device to said printer using said second communication means (the parent camera 120 has a function to detect residual amount of sheets to be used in printer 130 and to detect the state of communication with the printer 130 and when the state of communication between the parent camera 120 and the child camera 110 plus the printer 130 is worsened to be cut which means the data communication is not conducted, Fig 12) (18:48-19:4, Tamura).

6. Claims 4, 5, 10, and 14-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumakura in view of Tamura, and further in view of Farrell (US 2004/0150840).

Regarding claim 4, the limitations of claims 1 and 3 are taught above, Kumakura and Tamura do not disclose the printer controlling device is a digital camera for producing said image data by photographing a subject and for producing said print data by adding the print-setting data to the image data.

However, Farrell discloses the printer controlling device is a digital camera (output from a digital camera) for producing said image data by photographing a subject and for producing said print data by adding the print-setting data to the image data (the image data is provided in a form of an image data file, which is constructed from set-up information and associated image data) ([0036], Farrell).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the camera as taught by Farrell into Kumakura and Tamura's communication system, as to use the metadata to modify the structure of the image and to improve the quality of the image when rendering the image ([0036], Farrell).

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Regarding claim 5, Kumakura discloses a first communication means is a pair of first radio interfaces (high speed modems 13 and 23, Fig 1) for conducting said high-speed radio communication, and said second communication means is a pair of second radio interfaces (low speed modems 12 and 22, Fig 1) for conducting said low-speed radio communication (2:35-58, Kumakura).

Regarding claims 10 and 14, these claims recite same limitations as claim 5. Thus they are analyzed and rejected as previously discussed with respect to claim 5 above.

Regarding claim 15, Tamura discloses print-setting data of print data includes information concerning a print size, an image-quality mode and a printing direction (print designating information which designates images to be printed, print size information which sets the print size, information of the number of prints which sets the number of prints, and print finish information related to print finish) (10:45-50, Tamura).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included print-setting data of print data as taught by Tamura into Kumakura's communication system, so as to enable the camera providing print information corresponded to the digital image information and with a transmitting-receiving means which conducts transmission and receiving of data (3:22-39, Tamura).

Regarding claim 16, Tamura discloses the printer controlling device is a digital camera (liquid crystal screen 122 of a touch panel type of an electronic camera, Fig 12) (18:1-47, Tamura).

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7. Claims 6-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumakura in view of Tamura and Farrell, and further in view of Otsuka (US 2002/0140963).

Regarding claim 6, the limitations of claims 1-5 are taught above, Kumakura, Tamura and Farrell do not disclose the first communication means is based on a standard of IEEE 802.11a or 11b, and said second communication means is based on a standard of IEEE 802.11b or Bluetooth.

However, Otsuka discloses a print system first communication means is based on a standard of IEEE 802.11a or 11b, and said second communication means is based on a standard of IEEE 802.11b or Bluetooth ([0133], Otsuka).

Kumakura, Tamura, Farrell and Otsuka are analogous art because they are from the same field of data communication between printer controlling device and printer. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Otsuka's wireless communication in Kumakura, Tamura, and Farrell's system. The suggestion/motivation would have been to enable the printer has a communication system according to IEEE 802.11 or Bluetooth ([0068], Otsuka).

Regarding claim 7, this claim recites same limitations as claim 6. Thus it is analyzed and rejected as previously discussed with respect to claim 6 above.

8. Claims 8 and 11-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumakura in view of Tamura and Farrell, and further in view of Omura (US 6,999,113).

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Regarding claim 8, Kumakura, Tamura, and Farrell disclose a print system having a printer controlling device and a printer, which performs printing on the basis of print data including a plurality of data segments inputted from printer controlling device. Kumakura, Tamura, and Farrell do not disclose the printer has a battery as a power source so as to be portable. However Omura discloses a printer has a battery as a power source so as to be portable (battery chamber lid 22 and battery pack 24) (4:12-16, Omura).

Kumakura, Tamura, Farrell and Omura are analogous art because they are from the same field of printer for outputting image data. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Omura's battery chamber and battery pack in Kumakura, Tamura, and Farrell's system. The suggestion/motivation would have been to enable the printer has a capability to connect to some external apparatuses for exchanging image data from each other. It is also possible to power the portable instant printer from the net through an AC adapter or the like (4:12-16, Omura).

Regarding claim 11, this claim recites same limitations as claim 8. Thus it is analyzed and rejected as previously discussed with respect to claim 8 above.

Regarding claim 12, Tamura discloses print-setting data of print data includes information concerning a print size, an image-quality mode and a printing direction (print designating information which designates images to be printed, print size information which sets the print size, information of the number of prints which sets the number of prints, and print finish information related to print finish) (10:45-50, Tamura).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included print-setting data of print data as taught by Tamura into

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Kumakura's communication system, so as to enable the camera providing print information corresponded to the digital image information and with a transmitting-receiving means which conducts transmission and receiving of data (3:22-39, Tamura).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Sato (US 7,042,496), Shaklee et al. (US 6,166,825), Christodoulou et al. (US 2003/0095275), Szabelski (US 2004/0168001), Ozawa et al. (US 6,115,137), Yoshida et al. (US 6,690,417), Niida et al. (US 6,996,096), and Parulski et al. (US 7,038,714).

Inquiries

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).
11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have

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questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KW

15 October 2008

*/Ngoc-Yen T. VU/
Supervisory Patent Examiner, Art Unit 2622*